

Trade Insecurity and Food Security:

After Seattle

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Growing Insecurity Over Trade

The failed trade ministerial in Seattle at the end of 1999 showed how much can go wrong with world trade, and how insecure its future now seems. Lurking beneath this new insecurity are fundamental issues in which trade is a critical component. Among the most vital is global food security - the capacity to feed a growing world in the 21st Century. In this essay, we shall argue that a new focus on enhancing food security could play a uniquely constructive role in engendering international cooperation and facilitating future trade negotiations.

The Seattle meeting symbolized the disarray of those responsible for world trade policy. What might have been an endorsement of shared global economic goals was largely wrecked by

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the U.S.'s over-reaching unilateralism, which offended delegations from around the world and undercut the multilateral premise of the gathering. In fact, it is not overstatement to say that the Seattle meeting (or non-meeting) occurred at the wrong place, the wrong time, with the wrong people, saying the wrong things. When the Uruguay Round was launched at Punta del Este, Uruguay in 1986, it followed at least four years of carefully orchestrated meetings and planning to assure that an agenda was ready for approval. Punta was a quiet remove in a developing country — an important symbolic point not lost on Third World delegations. Seattle, by contrast, was a magnet for malcontents of every possible stripe and the headquarters of a variety of U.S. multinationals that were among their targets. Seattle was the wrong place to launch a new round.

If the Clinton administration had envisioned in Seattle a coup for multilateralism, its actions revealed that, like most of the environmental and labor representatives present, it was more than willing to press U.S. norms and standards on the rest of the world, especially developing countries. If there was any strategy added to this conceit, it was to finesse the difficult “new” issues of environment, labor standards and Genetically Modified Organisms (GMOs) with “working groups,” although no one knew how to finesse the deep divisions over agriculture, to which we will turn momentarily. Experienced trade negotiators knew that no serious progress would be made until after the next U.S. presidential election, and that any trade commitments made in the last days of the Clinton presidency would be deeply discounted, not least because Congress has not renewed its fast-track negotiating authority. In these and other respects, the Seattle meeting came at the wrong time: too late in a waning Clinton presidency, and too early to capture the energy of a new administration.

Many senior trade ministers from the rest of the world had the good sense to stay home.

Clinton blundered into Seattle by suggesting on the opening day that international labor standards would lead to aggressive U.S. enforcement actions — effectively alienating the entire developing country bloc (roughly 100 out of 134 participating countries). This was compounded when the U.S. delegation waffled on labor issues to reach agreement, including dropping the idea of a labor working group. In late January, 2000, Clinton startled many business and government leaders seeking to resuscitate the WTO and a new round of trade talks by essentially repeating his Seattle themes before the World Business Council in Davos, Switzerland. Once again, developing countries were unimpressed — to say the least. President Ernesto Zedillo of Mexico, in his own speech, took emphatic issue with Clinton, effectively saying: “No way.” In an article appearing in the January, 2000 edition of *Africa Recovery*, a writer noted that:

African trade ministers arrived in Seattle ready to press for a “development round” to address the deepening poverty in their countries. Instead, they were shut out of negotiations and their issues excluded from consideration. The angry refusal of African and Caribbean governments to accept any agreement reached without their consent doomed the meeting to failure and ensures that the interests of developing countries can no longer be ignored when setting the global trade agenda. ... *Africa Recovery* also notes that the failure to launch a new round of trade negotiations in Seattle locks developing countries into all the disadvantages of the current system that African governments and non-governmental organizations were seeking to change (Thompson, 2000).¹

Despite the alienation felt by developing countries, the conventional media conclusion taken from Seattle continues to be that labor, environmentalists and other special interests for the first time

¹Julie Thompson, “WTO Impasse Opens Opportunities and Dangers for Africa UN Secretary-General Urges A ‘Development Round’.” *Africa Recovery* Press Release, UN Department of Public Information, United Nations, New York. January 5, 2000.

caught the ear of the trade diplomats, and finally “got to the table.” In fact, labor had been a part of the advisory bodies to the U.S. trade representatives for decades, and environmental representatives had been given similar advisory status. Many in the environmental and trade community have worked for years to integrate trade, environment and labor issues. It is arguable that rather than coming closer to the trade table, the influence of environmental and labor groups was reduced in Seattle by their radical fringes, confirming the worst fears of developing countries: that turtle suits and dolphin costumes are really forms of protectionist cross-dressing. Ironically, most of the gains made by environmental and labor interests in trade have been, and will continue to be, linked to the existence and success of the WTO, not to its demise.

Rather than ushering in a new era in global economic interdependence, in which the trade debate, as the media gushed, was now a debate over globalization, the Seattle meeting arguably created a new sense of insecurity and a palpable alienation of the developing countries to whom growth through trade may be most vital in the decades to come. This insecurity and alienation is shared alike by those who imagine themselves outside the trade system, as well as those on the inside, seeking to satisfy the wide-ranging and often conflicting demands of environmental, labor and consumer groups. This may have been a “defining moment” for a diverse array of groups who imagine the WTO as a symbol of multinational corporate power, but it is difficult to see what exactly the moment defined. While press reports focused on the protesters of globalization, the intense differences among and between governments, NGOs and environmental and labor interests amounted to the transmogrification of a trade meeting into a Tower of Babel. When trade policy was the realm of diplomats and economic and trade policy experts at least there were bids and offers. From the outside the Seattle battleground

seemed more closely to resemble a war of many clans, with no winners, only losers. Trade discussion did take place but, as expected, no breakthroughs occurred.

Declining Food Security

In the midst of this impasse, a troubling and profound question, with linkages to the heart of the trade policy, remains. There is a growing body of evidence that notwithstanding current surpluses and depressed commodities prices, the world may become less able to feed itself in the early 21st century. The International Food Policy Research Institute (IFPRI) estimates that about 73 million people will be added to the world's population every year between 1995 and 2020, increasing it 32 percent to 7.5 billion. Almost all the population growth will occur in developing countries and much of it will be urban. Per capita incomes will also increase, especially in developing countries, allowing households to purchase more meat and animal products, with demand for meat in the developing world projected to double between 1995 and 2020.² To meet the demands posed by population and income growth, the world must produce 40 percent more grain by 2020. Only about one-fifth of this increase is likely to come from expanding the amount of land in production. Yet yield increases are slowing from the heady days of the Green Revolution in the 1970s.

It is in this context that trade will play an increasingly vital role in food security. Because cereal production in the developing world will not keep pace with demand, net cereal imports by developing

²Per Pinstруп-Andersen, Rajul Pandya-Lorch and Mark Rosegrant. *World Food Prospects: Critical Issues for the Early Twenty-First Century*. 2020 Vision. IFPRI Food Policy Report. Washington, D.C. October 1999.

countries will need to almost double between 1995 and 2020 (to nearly 200 million tons) in order to fill the gap between production and demand. Net imports of meat will need to increase to 6.6 million tons — or by a factor of eight times. While many of the critics of global trade in Seattle advocated a return to locally-produced goods, including food, the hard truth is that about 60 percent of world net cereal imports in 2020 will come from the United States. This role is not purely a reflection of American dominance as a comparatively advantaged producer of grains and livestock. In fact, the presumption is that Eastern Europe, the former Soviet Union, the European Union and Australia will also substantially increase their net exports. If any of these groups, notably the former Soviet Union, fail to do so, the burden of supplying the rest will fall to the remaining net exporters.

Assuming that production and trade continue to keep pace with demand, per person food availability in most developing countries will rise by about 10 percent from 1995 to 2020. But even so, 135 million children under the age of five are projected to remain hungry in 2020, especially in Sub-Saharan Africa and South Asia. In Africa, their number is projected to increase by 30 percent by 2020. And if production and trade do *not* keep pace with demand, due in part to disruption in the international flow of technology and food, these projections may mask the reemergence of the Malthusian specter which the late 20th century seemed nearly to have banished. Even under the projections noted above, stagnating yield increases and growing demand will mean that real prices for food will not continue to fall for most consumers as during the last quarter century. Between 1982 and 1995, for example, real world wheat prices fell by 28 percent, rice prices by 42 percent and corn (maize) prices by 43 percent. While posing competitive pressures on farmers, these trends were a boon to consumers, especially the urban poor. Such trends are unlikely to persist in the next century,

and if production or trade falters, may actually reverse themselves.

The challenge of food security has many facets, but is thus essentially a race between productivity and populations with rising incomes. The relevance of trade, at a fundamental level, is that it enables food (primarily grain) to move from areas of surplus to areas of deficit, and enhances the capacity of deficit regions to feed themselves, assuming they can afford to pay. Expanded market access to developed country markets also increases the export earnings of developing countries raising the cash needed to buy food and other goods. Conversely, anything which restricts this movement, or reduces their ability to pay, will damage this capacity. Beyond this broad relevance, many of the most important issues debated but left unresolved in Seattle involve direct connections between trade, food production and the environment, including biotechnology.

The Seattle meetings showed that the deep rifts over agricultural subsidies and market access, especially between the U.S. and E.U., (which nearly wrecked the Uruguay Round negotiations) remained largely unresolved. They also showed that environmentalists, who came to the negotiating table late in the Uruguay Round, and who now intend to be fully heard in agriculture as well as in other negotiating areas, do not yet speak with a clear voice. They showed that agricultural biotechnology, whatever it may auger for world agriculture, will be met by vocal and aggressive opposition as a symbol of globalization. Yet food production, and security, will be powerfully affected in the next century by trade policy, concerns over environmental sustainability, biotechnology, and the interplay of these issues in the international economy.

Whether the world can feed itself in the next century will thus depend on whether the international community turns to, or away from, trade as a way of moving food from surplus to deficit

regions. It will also depend on whether countries adopt resource conserving methods to sustain water, land and forests, or deplete them in order to meet other needs. It may also depend on whether farmers turn to, or away from, biotechnology and genetically modified organisms (GMOs) as a technological path. Finally, it will depend on whether food security emerges as a consensus objective of international economic policy, or as another battleground among competing national interests.

Food Security as Collective Action

An essential challenge posed by global food security is that perceived national interest too often leads governments to hoard food stocks and/or artificially encourage production, ostensibly to buffer consumers from food shortages and swings (i.e., increases) in market prices. Even where the international market offers a source of food at cheaper prices, the notion of dependence on these external sources is anathema to many politicians and their constituents in both North and South. Food self-reliance and independence from foreign interference, even at demonstrably higher costs to the nations involved (many of which are poor) is a generally popular form of nationalism. Even when countries are net exporters of food, such as the United States, it is not unusual to see protectionist regimes erected for commodities where foreign competition is perceived as a threat, as in the U.S. sugar program. This program, among others (such as the historical U.S. subsidy to wool and mohair) has been defended on “national security” grounds, in the same spirit as government stores of strategic metals.

The appeal to self-sufficiency is even greater where historical memories of privation and food shortage exist, as in the European Union and Japan. In the Post-War period the Europeans

consciously erected a protectionist regime encouraging domestic food production to reduce their then net imports from the rest of the world. Unfortunately, the regime survived to see them become net exporters of wheat in the late 1970s, which was then subsidized for export in order to clear European markets, creating a domestic constituency dedicated to perpetuating both domestic and export subsidies, and setting the stage for the continuing battles over these subsidies with the U.S., Canada, Australia and others. Japan, which remains the largest net importer of U.S. agricultural products, nonetheless clings to a policy for rice which grossly subsidizes its domestic production, shutting out competitive rice from much lower cost producers in Asia and elsewhere.

Among developing countries, India represents an especially striking case of the drive for self-sufficiency. Efforts to raise food production and reduce reliance on imports have been a hallmark of every Five-Year Plan since independence in 1947. With substantial government subsidies to wheat and rice, largely to the exclusion of other crops, India has raised wheat production 10 times over since 1947, and is now the world's second-largest producer of rice and tied with the U.S. as the second-largest producer of wheat.³ It has reduced food imports from a high of 10.5 percent of production in 1965 to become, for a period in 1995, a net exporter of both wheat and rice. Yet behind these achievements lurk more disturbing trends. As wheat and rice production and consumption have grown, production and consumption of pulses (chickpeas, pigeon peas, mungbean, lentils), the main protein source for most of India's population and nearly all of its poor, have fallen. The result is that from 1960 to 1995, per capita supplies of protein from all plant products increased only modestly from 47.3 to

³Gordon R. Hopper. "Changing Food Production and Quality of Diet in India; 1947-98." *Population and Development Review* 25:3 (September, 1999): 443-477.

48.7 grams/day, and supplies of critical amino acid proteins actually fell from 9,384 to 8,790 milligrams/day.⁴ A careful review of these trends recently concluded that India is still short of its dietary and food energy requirements, estimating that 56 percent of its population is short of energy requirements and 74 percent does not meet minimum protein requirements, with 624 million people malnourished.⁵ In order to overcome these deficits greater food imports are a rational and cheaper alternative to continuing subsidization of domestic production, especially of wheat, the world's most widely traded and available crop. As the review noted, "If the government chooses to pursue its present path of self-sufficiency, its single-mindedness may serve not only to delay the country's social and economic development, but also to prolong the misery of million of malnourished people."

The consequence of national policies such as these has been to reduce the reliance of many nations on international trade as a source of lower-cost food supplies, allegedly on the grounds that the international market is "insecure." Yet the collective consequence of these schemes of hoarding and protection is actually to destabilize the international market, further reinforcing this sense of insecurity. In an analogy to the Keynesian "liquidity trap," hoarding and protectionism helps to guarantee that fears of instability will be realized, driving countries deeper into calls for national self-reliance.

Of course, it is important not to assume naively that world trade in food grains is a sufficient condition for food security, especially when access to these supplies is seriously constrained by low levels of purchasing power. Yet, even high grain prices and low levels of grain stocks may only marginally affect poor countries, since these countries are simply not in the market for such grains.

⁴Hopper, 1999, p. 456.

⁵Hopper, 1999, p. 466.

Such conditions are also often associated with above-trend levels of macroeconomic growth, or corresponding increases in other raw materials and commodity export prices on which these countries depend.⁶ A careful review of the relationship between global grain markets and food importing needs, especially of poor countries, reveals many potential opportunities foregone in order to avoid, as India's Congress Party put it, exposure to the "whirlpool of economic imperialism."⁷ If these countries are averse to food imports, it is less because of their purported unreliability or instability than, as Robert Paarlberg notes, "because of a larger policy aversion the governments in these countries have to all markets, both grain and non-grain, both domestic and foreign."⁸

Even if, as somewhat fruitlessly argued by some economists, it would benefit countries *unilaterally* to refrain from protecting their domestic food markets, most nations (or at least their elected politicians and non-economists) believe that unless other countries make matching concessions, no country should unilaterally "disarm." Hence, despite the economic logic of comparative advantage in food production, those at comparative disadvantage (and even those comparatively disadvantaged sectors such as sugar in U.S.) continue to insist on protection which can only be lowered when others have made concessions to match. The strategic form of this game is "after you, Alphonse," in which each nation waits for others to make the first move toward liberalized trade before moving themselves.

⁶Robert Paarlberg. "The Weak Link Between World Food Markets and World Food Security," in *Policy Reform, Market Stability and Food Security*. (Robert Paarlberg and Terry Roe, eds.), International Agricultural Trade Research Consortium. St. Paul, MN. Department of Applied Economics. 1999.

⁷T. N. Srinivasen, quoted in Paarlberg, 1999, p. 139.

⁸Paarlberg, 1999, p. 140.

Collective Action and Multilateral Institutions

In order to break out of this dilemma, a mechanism for entertaining bids and offers for mutual concessions is necessary. This has been the function played by trade agreements, beginning in 1947 with the GATT Articles, where bids and offers within and across sectors were swapped to achieve an ultimate package. Rather than the realization of a neoclassical free trade dream, the GATT/WTO has really been a form of mutual, but managed, mercantilism or tit-for-tat concession-making.

Unfortunately few bids, and even fewer offers, have come in agriculture. For the first seven rounds of negotiations, until the Uruguay Round of 1986-93, agriculture remained largely off the table at the behest of the U.S. and European Community, who argued that it was too sensitive to be subjected to the disciplines being applied to manufacturing. It took the agricultural export subsidy wars of the 1980s, brought on by the European commodity surpluses, to shatter this mutual silence, and to create the conditions under which the Uruguay Round began to tackle agricultural subsidies in earnest.⁹ Throughout the Round, European interests sought to develop and lend succor to NGO groups in the U.S. who would do their bidding, arguing that free trade harmed U.S. farmers as well as European ones (a view largely rejected by most, although not all, U.S. agricultural interests). When the final compromises over agriculture were reached in 1993, modest disciplines were put in place for export subsidies, market access, and Sanitary and Phytosanitary (SPS) measures, but a major liberalization eluded the negotiators.

At the same time, issues of environmental quality emerged in ways linked to trade liberalization

⁹C. Ford Runge. "The Assault on Agricultural Protectionism." *Foreign Affairs* 67:1 (Fall, 1988): 133-150.

in agriculture and beyond. In part, the linkages from trade to the environment arose from a growing perception that growth through trade would undermine environmental quality, leading to a worldwide “race to the bottom.” While this pessimistic argument was unsupported by experience or empirical evidence, it retained a large following among environmental protectionists. More optimistic groups saw in the linkage to trade a chance to implement transboundary rules to protect environmental resources, so that liberalization could help leverage needed environmental oversight.¹⁰ Neither the environmental pessimists nor the optimists dealt explicitly with agricultural issues or food security and trade until the emergence of genetically modified organisms (GMOs) made a connection. GMOs also became a *cause celebre* for consumer groups who had been relatively uninvolved in trade policy, lending strength to a coalition of anti-trade activists that already included labor and many environmentalists, as well as both left and right wing groups fearful of international organizations.

The remarkable feature of the GMO issue is that it gave traction to all of these protectionist elements, while allowing them to pose as enemies of multinational corporate expansion. While the companies responsible for GMOs are both U.S. and European-based, opposition grew first in Europe, largely aimed at American multinationals, especially St. Louis based Monsanto, one of the leading sellers of genetically modified corn, soybeans and cotton seeds. Especially when Monsanto indicated the possibility of a “terminator” gene that would render the offspring of GMO plants sterile (preventing the retention of seeds by traditional farmers) developing countries led by India joined Europeans in a call for additional trade protections against the spread of these crops. Environmental pessimists added

¹⁰See Grant Hauer and C. Ford Runge, “Trade-Environment Linkages in the Resolution of Transboundary Externalities.” *The World Economy* 22:1 (January 1999): 25-39.

that GMOs were capable of spreading unwanted resistance to weeds and insects beyond the target species, potentially creating “superweeds” and other unwanted environmental side effects. Consumer groups rejoined by arguing that GMOs could threaten (in ways largely unspecified) the quality and safety of foods produced with such crops.

These developments threatened much more than the bottom line of companies such as Monsanto (although investment bankers urged it to sell off the agricultural life science divisions that were its flagship a few years earlier). They raised issues for exporters of GMO crops in the U.S. and elsewhere who had adopted them with enthusiasm, and for researchers who had bet hundreds of millions of dollars on the potential for the technology to help address disease and production issues for farmers in the developing world. An example was the announcement in January 2000 that scientists had genetically altered rice that could virtually end vitamin A deficiency in the developing world, a cause of blindness and other health problems for millions of poor children. Researchers at a Swiss laboratory spliced genes into rice enriching it with beta carotene, the source of vitamin A. The result, if such rice varieties are widely adopted, may be to prevent one to two million deaths a year.¹¹

The rapid adoption of GMOs since 1996 suggests that the technology has major appeal to farmers, at least in developed countries. GMOs burst onto the scene in 1996 with the rapid commercial introduction in the United States of genetically-engineered corn (maize), cotton, and soybeans, although genetically-engineered horticultural crops, such as tomatoes, had been approved as

¹¹Mary Lou Guerinot. “The Green Revolution Strikes Gold.” *Science*, Vol. 287, January 14, 2000, p. 241-243. Xudong Ye, Salim Al-Babili, Andreas Klöti, Jing Zhang, Paola Lucca, Peter Beyer, and Ingo Potrykus. “Engineering the Provitamin A (β -Carotene) Biosynthetic Pathway into (Carotenoid-Free) Rice Endosperm.” *Science*, Vol. 287, January 14, 2000, pp. 303-305.

early as 1992. By 1998, more than 500 genetically modified plant varieties were available in the United States, accounting for 28 percent of the areas (2.57 million hectares) planted to maize, soybeans and cotton. Argentina and Canada had each planted an additional 100,000 hectares to GMOs and other countries (South Africa, Spain, France, Mexico, China, Australia, Brazil) had planted less than 100,000 hectares each (James, 1999).¹² Perhaps more significant to consumers, these crops rapidly entered the supply chain for processed foods using corn, soybean, or cotton seed oils, with some estimating that between 70-100 percent of processed foods now contain GMOs (*Economist*, 1999).¹³

In Third World countries the appeal of GMOs remains uncertain, although major funders, such as the Rockefeller Foundation, have for nearly two decades sought to harness the technology to the needs and purposes of poor farmers. Unfortunately, most developing countries possess few of the technical resources to develop their own scientific and management capacity for biotechnology. This will require a “massive effort,” according to Robert Herdt of Rockefeller, involving substantial flows of capital, human resources and scientific information and expertise across national borders. Multinational companies heavily invested in GMOs could aid this process, Herdt argues, by establishing training fellowships for scientists.¹⁴ Such an effort could be bolstered by international agreements over the protection of intellectual property owned by both the companies and the developing countries

¹²Clive James. “Global Review of Commercialized Transgenic Crops: 1998.” International Service for the Acquisition of Agri-Biotech Applications, Ithaca, NY. 1998.

¹³*Economist, The*. (1999). “Sticky Labels.” 351:75(1999).

¹⁴Robert Herdt. “Enclosing the Global Plant Genetic Commons.” Paper presented to the China Center for Economic Research. May 24, 1999.

themselves.¹⁵

GMOs connect agriculture, trade, environment and food security in a chain of causation that cries out for a global structure of rules and disciplines — precisely what the much maligned WTO/GATT system is placed (without any obvious alternative) to provide. Ironically, GMOs have become central to the new protectionist coalitions case against the world trading system, and the agreements over intellectual property that emerged from the last round of multilateral negotiations. If agricultural competition and market access remain at the heart of global trade negotiations; if environmental and trade linkages are now an acknowledged feature of these negotiations; and if trade, environment and GMOs all represent pieces of the food security puzzle, then it is inescapable that food security will be linked back to the rules that are formulated in the WTO to guide world trade, to deal with trade and the environment, and to restrict or allow trade in GMOs.

The global problem posed by food security is thus inextricably linked to the development of rules and agreements which operate at a level higher than the nation-state. Food security is a problem of *collective* national action, which can only be pursued through multilateral, as opposed to unilateral, policies. In this respect, food security is no different from international commerce which, as evidenced by the evolution of the WTO, also requires such rules. It is also similar to international environmental issues in which transboundary effects of economic activity (including GMOs) require transboundary rules and agreements. All involve international “collective goods” requiring concerted and coordinated

¹⁵Pamela J. Smith. “Patent Rights and Bilateral Exchange: A Cross-Country Analysis of U.S. Exports, FDI, and Licensing.” Presented at NBER Summer Institute: International Trade and Investment, August 3-6, 1998.

action.¹⁶

The Future Challenge

These global collective goods will not be provided without a willingness on the part of nation-states to make concessions through negotiated agreements. These concessions may be thought of as reciprocal contributions to the collective good, and must be perceived as part of a balanced package. Such packaged concessions will need to occur at several levels, all of which have been touched on above. Each involves an existing or emerging international institution, and in this respect requires more, rather than less, attention to the maintenance and development of a multilateral institutional infrastructure.

First, and most obviously, are the commercial concessions that must be made under the terms of the World Trade Organization's next round of multilateral negotiations. In particular, progress must be made in agriculture toward a next phase of increased market access and reduced export subsidies. Like the Uruguay Round, the next round of trade negotiations will face major resistance to this from agricultural interests, especially in the European Union. However, increasing food security will require that obstacles to the free movement of goods be reduced to a minimum, and that price instability generated by import or export levies or restrictions be disciplined over time.

Second, there is a need for new multilateral institutions to deal with challenges in the environmental area. It is unreasonable and unwise to expect the WTO to assume responsibility for environmental issues unless they impinge directly on trade. Even then, it is doubtful that the WTO can

¹⁶Todd Sandler. *Global Challenges*. Cambridge University Press. 1997.

retain and manage sufficient expertise for the manifold complex of international environmental issues.

For these reasons, many have now joined the former director general of the WTO in calling for a separate, multilateral environmental entity to respond to the need for rules resulting from ecological interdependence, much as the WTO itself responds to the need for rules resulting from commercial interdependence. A Global Environmental Organization (GEO) would also make possible a central point under which to organize the hundreds of existing environmental agreements and protocols.

Among other things, such an organization could undertake a global assessment of the environmental implications of the expanding market for GMOs. The implications of genetically engineered crops for trade and food security, while rapidly evolving, suggest that governments and the private sector will need to respond to calls for identifying and labeling of foods (and seeds) using those technologies, so as to afford those who reject them the opportunity to do so. A Canadian survey of eight countries found, for example, that 68 percent of respondents overall said they would be less likely to buy groceries labeled to say that they contain genetically modified ingredients, ranging from a low of 57 percent in the U.S. to 82 percent in Germany.¹⁷ The objective should be to remove the opportunity to use GMOs as another excuse for trade protection, while permitting trade in *both* GMO and GMO-free products maximum freedom. Again, some form of multilateral institutional response, perhaps under the auspices of the new biosafety protocol, or the Food and Agriculture Organization's (FAO) Codex Alimentarius, will be required to certify a relatively uniform approach across countries, and to

¹⁷Anne McIlroy. "Canadians wary of genetically altered foods." *The Globe and Mail*. January 15, 2000, p. 2.

harmonize what will inevitably be differing national standards.¹⁸

The conclusion in late January 2000 in Montreal of a biosafety protocol for GMOs indicates that progress has been made. After a week of negotiations, more than 130 countries reached agreement on the Biosafety Protocol to the Convention on Biological Diversity. The Protocol lays out procedures for addressing the environmental risks and benefits of biotechnology, and creates a framework to help improve developing countries to protect biodiversity. However, many unanswered questions remain. Prominent among them is whether the new protocol contains allowances for protectionist use of the “precautionary principle” to bar GMO trade even if scientific evidence of harm is insufficient.¹⁹ A central issue will be the balance between such trade restrictions, justified on environmental or health safety grounds, and the larger obligations of nations to non-discrimination under the WTO.²⁰ As Alexander Haslberger, a leading European expert on biotechnology, noted in a recent contribution to *Science*:

This significant public opposition to the use of GMOs in many regions of the world clearly indicates that only by addressing environmental concerns and consumer demands with improved risk management (specifically monitoring) and appropriate labeling will it be possible for the industry to introduce GMOs into worldwide markets without significant resistance.²¹

¹⁸C. Ford Runge and Lee Ann Jackson. “Labeling, Trade and Genetically Modified Organisms (GMOs): A proposed Solution.” Forthcoming in *The Journal of World Trade*, Vol. 34, No. 1, 2000.

¹⁹Andrew Pollack. “130 Nations Agree on Safety Rues for Biotech Food.” *New York Times*, January 30, 2000, p. A-1.

²⁰C. Ford Runge. “A Conceptual Framework for Agricultural Trade and the Environment: Beyond the ‘Green Box’.” *The Journal of World Trade* 33:6 (December, 1999).

²¹Alexander G. Haslberger. “Monitoring and Labeling for Genetically Modified Products.” *Science*, Vol 287, January 21, 2000, pp. 431-432, quote p. 432.

Lastly, the issue of food security itself cannot be used as an excuse to restrict market access or to subsidize production in ways most costly to the countries who can benefit most from opportunities to purchase food on the open market. In order to provide a degree of assurance to countries and their citizens fearful of excessive reliance on market forces, however, rules must be in place providing for guaranteed access to food in times of transitory emergency. This can be accomplished by multilateral grain-sharing agreements in which emergency concessionary terms are guaranteed. Once more, the need is for collective commitments from governments and the private sector to allay the fears and reduce the calls of those most mistrustful of market forces and the dark side of globalization. These include many developing countries.

Since developing countries now account for some three-fourths of the member nations of the WTO, few new trade agreements will be reached without their support. The Third World bloc clearly has it in its power to block future WTO accords that are perceived not to be in their interests. Food security is a concern of particular prominence in many of these countries. A commitment to mold agricultural trade to enhance food security could thus generate the goodwill necessary among developing countries to facilitate their cooperation across a range of global issues. A precondition for successful international cooperation is that all participants perceive a net benefit.²² However, not all countries gain equally from every international accord and in some instances they may lose on specific issues. Commitments that enhance food security could provide gains necessary from the perspective of developing countries to allow greater progress on achieving international cooperation on a range of

²²Sandler, 1997, p. 14.

other issues of importance to the United States and other industrial nations, such as environment and intellectual property rights.

Henry Kissinger remarked after the Seattle trade meeting's missed opportunities that "President Clinton could have used the occasion to put forward a farsighted program for dealing with what portends to be one of the greatest challenges of the new century: the huge gap between the sophistication of the dominant economic model, called globalization, and traditional political thinking still based on the nation state." The challenge, he noted, is now "to foster an international sense of social responsibility without strangling a successful economic system in regulations imposed by international bureaucrats."²³ Responding to this challenge will require more, and better, international institutions, not fewer and worse ones.

²³Henry Kissinger. "Making a Go of Globalization; For Free Trade to Work, Political Imagination Must Match Economic Growth." *Washington Post*, December 20, 1999, p. A33.